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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/750,715	12/31/2003	Chris J. Newburn	42P18598	1390

8791 7590 01/04/2006

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EXAMINER	
FARROKH, HASHEM	
ART UNIT	**PAPER NUMBER**
2187	

DATE MAILED: 01/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/750,715	NEWBURN ET AL.	
	Examiner	Art Unit	
	Hashem Farrokh	2187	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 December 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 2* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 2* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *31 December 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *11/14/05,8/22/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

The instant application having application No. 10/750,715 has a total of 2 claims pending in the application; there are 2 independent claims and zero dependent claims, all of which are ready for examination by the examiner.

INFORMATION CONCERNING CLAIMS:

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> *A person shall be entitled to a patent unless –*
>
> *(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.*

Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,735,673 B2 to Kever.

1. In regard to claim 1, Kever teaches:

"A memory controller comprising a compression map cache," **(e.g., see column 4, lines 38-52; element 214 in Fig. 2).** *For example cache tag array represent the compression map cache.*

"said compression map cache to store information that identifies a cache line's worth of information that has been compressed with another cache line's worth of information." **(e.g., see column 5, lines 21-37; steps 430-442 in Fig. 2).** *For example the*

compressed data is written to half-length available subsection and thus the cache line includes two half-length compressed subsections.

Claim2 is rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,640,283 B2 to Naffziger et al. (hereinafter Naffziger).

2. In regard to claim 2, Naffziger teaches:

"A processor and a memory controller integrated on a same semiconductor die," **(e.g., see column 1, lines 8-12; element 103 in Fig. 1; Fig. 2).** *Fig. 2 is a part on chip processor level 2 cache that includes cache and cache or memory control unit(s).*

"said memory controller comprising a compression map cache," **(e.g., see column 5, lines 29-39; element 204 and 212-216 in Fig. 2).** *For example the level 2 processor cache 106 shown in Fig. 2 includes the tag cache 204 and compression flag 212 and link and space list which represents the compression map recited in the claim.*

"said compression map cache to store information that identifies a cache line's worth of information that has been compressed with another cache line's worth of information." **(e.g., see column 3, lines 59-67; column 4, lines 41-44; column 5, lines 29-39; column 6, lines 49-54; column 8, lines 13-20; Fig. 2).** *For example the compression engine scan the cache lines and determine if any of sub cache line within a cache line is uncompressed. The compression engine compresses (if compressible) data or information in the sub cache lines and set the compression flags to indicate the*

compression status. Thus more than sub-line of compressed data or information is being stored in a cache line.

Conclusion

The prior art made of record and not relied upon are as follows:

1. U. S. Patent No. 5,732,202 to Okamoto describes Data processing apparatus, data processing method, memory medium storing data processing program, output device, output control method and memory medium storing control program therefor.

2. U. S. Patent No. 2003/0191903 A1 to Sperber et al. describes Memory system for multiple data types.

3. U. S. Patent Publication No. 2001/0001872 A1 to SINGH et al. describes DATA CACHING WITH A PARTIALLY COMPRESSED CACHE.

Any inquiry concerning this communication should be directed to Hashem Farrokh whose telephone number is (571) 272-4193. The examiner can normally be reached Monday-Friday from **8:00 AM to 5:00 PM.**

If attempt to reach the above noted Examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Donald A Sparks, can be reached on (571) 272-4201. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published application may be obtained from either private PAIR or Public PAIR. Status information for unpublished application is available through Private PAIR only. For more information about PAIR system, see http://pair-direct.uspto.gov. Should you have questions on

access to the Private PAIR system, contact the Electronic Business Center (EBS) at 866-217-9197 (toll-free).

~~HP~~
HF

2005-12-23

Brad R. Peak
Primary Examiner
AU 2187
12/27/05